

Fig. 1a

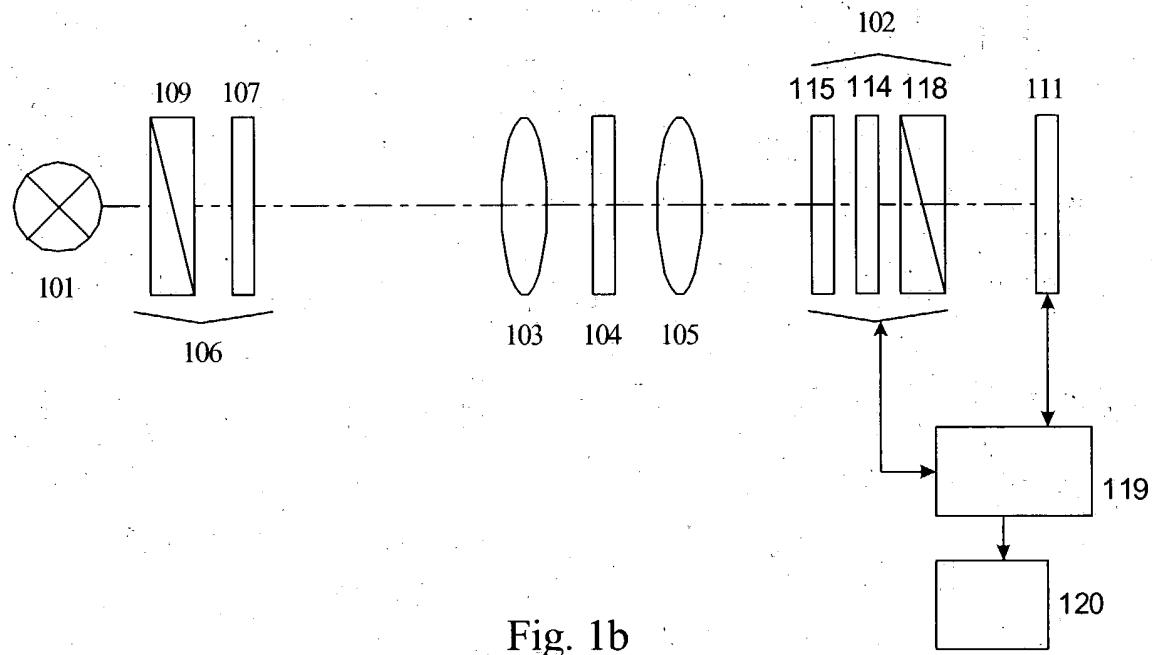
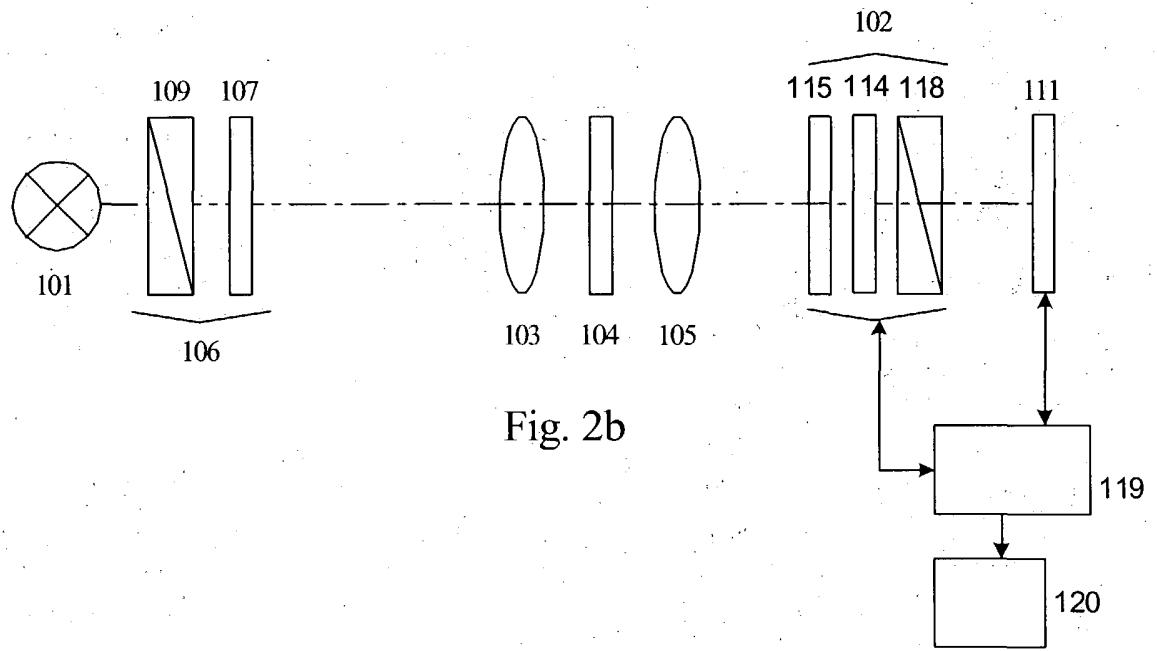
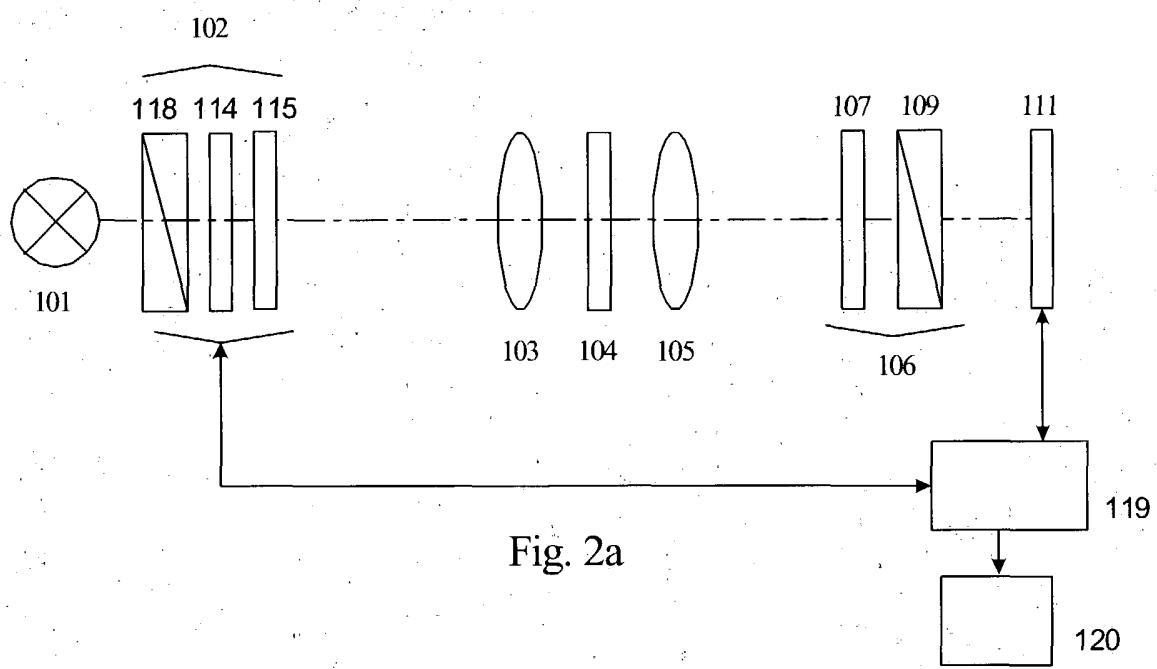


Fig. 1b



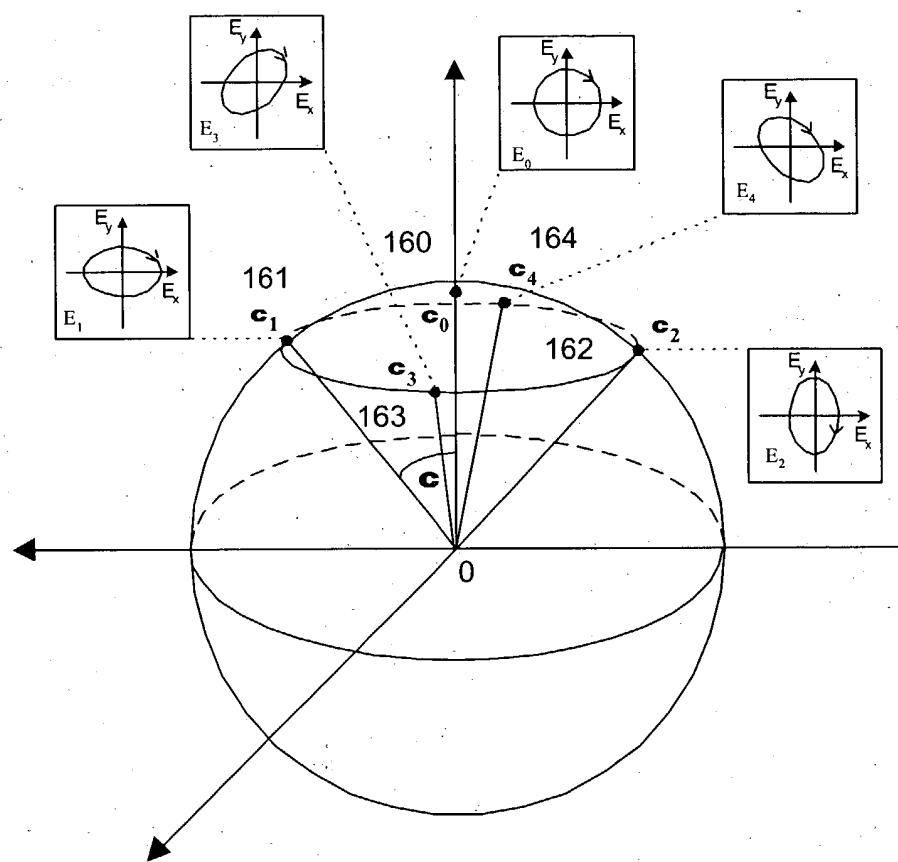


Fig. 3

Setting	Beam parameters		Retardances (Fig 1A)		Retardances (Fig 1B)	
	ϵ	γ	α	β	α	β
Σ_0	45°	NA	90°	180°	270°	0°
Σ_1	45°- $\chi/2$	0°	90°- χ	180°	270°- χ	0°
Σ_2	45°- $\chi/2$	90°	90°+ χ	180°	270°+ χ	0°
Σ_3	45°- $\chi/2$	45°	90°	180°- χ	90°- χ	180°
Σ_4	45°- $\chi/2$	135°	90°	180°+ χ	90°+ χ	180°

Fig. 4

N=2 ALGORITHM

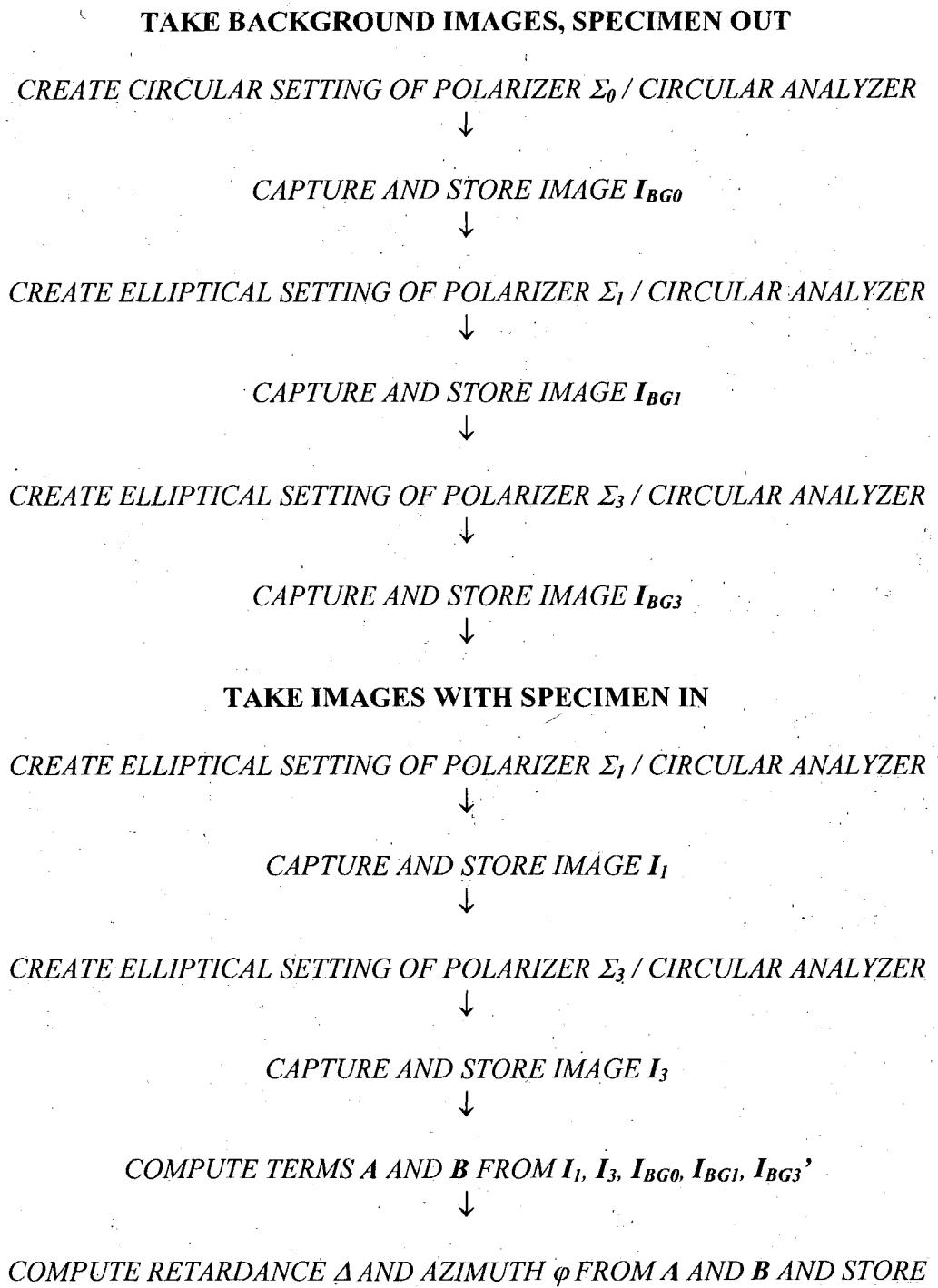


Fig. 5

N=3 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG1}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG2}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG3}



COMPUTE TERMS A_{BG} AND B_{BG} FROM I_{BG1} , I_{BG2} , I_{BG3} , AND STORE

Fig. 6

N=3 ALGORITHM

TAKE IMAGES WITH SPECIMEN IN

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_1



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_2



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_3



COMPUTE TERMS A AND B FROM I_1, I_2, I_3



COMPUTE CORRECTED TERMS $A' = A - A_{BG}$ AND $B' = B - B_{BG}$



COMPUTE RETARDANCE Δ AND AZIMUTH ϕ FROM A' AND B' AND STORE

Fig. 7

N=4 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG1}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG2}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG3}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_4 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG4}



COMPUTE TERMS A_{BG} AND B_{BG} FROM $I_{BG1}, I_{BG2}, I_{BG3}, I_{BG4}$ AND STORE

Fig. 8

N=4 ALGORITHM

TAKE IMAGES WITH SPECIMEN IN

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_1



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_2



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_3



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_4 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_4



COMPUTE TERMS A AND B FROM I_1, I_2, I_3, I_4



COMPUTE CORRECTED TERMS $A' = A - A_{BG}$ AND $B' = B - B_{BG}$



COMPUTE RETARDANCE Δ AND AZIMUTH ϕ FROM A' AND B' AND STORE

Fig. 9

N=5 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

CREATE CIRCULAR SETTING OF POLARIZER Σ_0 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG0}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BGI}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG2}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG3}



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_4 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_{BG4}



COMPUTE TERMS A_{BG} AND B_{BG} FROM $I_{BG0}, I_{BGI}, I_{BG2}, I_{BG3}, I_{BG4}$ AND STORE

Fig. 10

N=5 ALGORITHM

TAKE IMAGES WITH SPECIMEN IN

CREATE CIRCULAR SETTING OF POLARIZER Σ_0 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_0



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_1



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_2



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_3



CREATE ELLIPTICAL SETTING OF POLARIZER Σ_4 / CIRCULAR ANALYZER



CAPTURE AND STORE IMAGE I_4



COMPUTE TERMS A AND B FROM I_0, I_1, I_2, I_3, I_4



COMPUTE CORRECTED TERMS $A' = A - A_{BG}$ AND $B' = B - B_{BG}$



COMPUTE RETARDANCE Δ AND AZIMUTH ϕ FROM A' AND B' AND STORE

Fig. 11